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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/772,714

01/30/2001

Kurt E. Spears

10007856-1

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7590

05/19/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
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EXAMINER

GIBBS, HEATHER D

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/772,714

Applicant(s)

SPEARS, KURT E.

Examiner

Heather D Gibbs

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 17, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2-4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15, drawn to an image scanner apparatus, classified in class 250, subclass 208.1.
 - II. Claims 16-21, drawn to a method of compensation for illumination variation in an image scanner, classified in class 358, subclass 509.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case, Inventions I and II are unrelated, since Invention I is limited to an apparatus for scanning which comprises a calibration strip and photosensor arrays, and Invention II concerns a method of compensation for illumination variance in an image scanner, which does not require the apparatus of Invention I. Thus inventions I and II are independent invention (see MPEP 806.04 (c)).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with the attorney, Augustus Winfield (Reg. 34,046) on March 26, 2002 a provisional election was made without traverse to prosecute the invention of Group I, claims 16-21. Applicant in replying to this Office action must make affirmation of this election. Claims 1-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 16,20 are rejected under 35 U.S.C. 102(b) as being anticipated by Brandkamp et al (US 5,513,745).

Regarding claim 16, Brandkamp teaches of a method of compensation for illumination variation in an image scanner, comprising: initiating image scanning, as soon as sufficient illumination is available, without waiting for illumination to stabilize (Col 4 Lines 36-48); monitoring the intensity of the illumination, along substantially the entire length of a scanline, during scanning, during scanning (Col 4 Lines 53-57); and modifying an output of an imaging array, during scanning, in response to the intensity being monitored (Col 4 Lines 7-10).

Considering claim 20, Brandkamp teaches wherein each time the step of monitoring the intensity of illumination is performed, the following step is performed more than one time: measuring intensity values along a scanline (Col 6 Lines 1-8;Fig 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandkamp et al (US 5,153,745) in view of Hou (US 6, 054, 707).

Brandkamp discloses a method of compensation for illumination variation in an image scanner as discussed above in claim 16.

Brandkamp does not disclose expressly monitoring the color of the illumination, along substantially the entire length of the scanline, during scanning.

Hou discloses color illumination steps performed along the scanline while scanning (Col 6 Lines 48-67; Fig 5B).

Brandkamp & Hou are combinable because they are from the same scope of nature.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Brandkamp as to be compatible with Hou.

The suggestion/motivation for doing so would have been as both systems relate to providing an illumination system throughout a scanner system.

Therefore, it would have been obvious to combine Brandkamp with Hou to obtain the invention as specified in claim 17.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandkamp et al (US 5,153,745) in view of Suzuki (US 5,905, 569).

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Brandkamp discloses a method of compensation for illumination variation in an image scanner, comprising: initiating image scanning, as soon as sufficient illumination is available, without waiting for illumination to stabilize (Col 4 Lines 36-48); measuring the intensity of the illumination, a first time, along substantially the entire length of a scanline, during scanning; storing outputs of an imaging array for multiple scanlines (Col 4 Lines 53-57); measuring the intensity of illumination, a second time, along substantially the entire length of a scanline, during scanning (Col 6 Lines 18-23).

Brandkamp et al does not disclose expressly computing interpolated intensity values between the first and second measurements of the intensity of illumination; and using the interpolated intensity values to modify the stored outputs of the imaging array.

Suzuki discloses computing interpolated intensity values between the first and second measurements of the intensity of illumination; and using the interpolated intensity values to modify the stored outputs of the imaging array.

Brandkamp & Suzuki are combinable because they are from the same scope of nature.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Brandkamp and Suzuki.

The suggestion/motivation for doing so would have been since Suzuki teaches of an illumination measuring method that is used in a projection system as that of Brandkamp.

Therefore, it would have been obvious to combine Brandkamp with Suzuki to obtain the invention as specified in claim 21.

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Allowable Subject Matter

10. Claims 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches the equation for correcting data (Equation 1).

Specification

12. The disclosure is objected to because of the following informalities: Page 2 Line 15, insert punctuation "." Before the sentence "In some image". Page 2 Line 17 delete phrase "In some scanner". Page 2 Line 20 delete punctuation "," after "warm-up". Page 3 Line 26, delete punctuation "," after "fixed". Page 6 Line 9, change "array 108" to —assembly 108" so as to be conducive with Page 7 Line 8.

Appropriate correction is required.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.

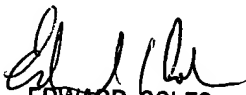
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather D Gibbs
Examiner
Art Unit 2622

hdg


EDWARD COLES
SUPERVISORY PATENT EXAMINER
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